AdvantagePlus Sealed-Combustion Gas-Fired Commercial Water Heaters

No Chimney Required

Vents Up To 40 Feet Using 3" Schedule 40 PVC, CPVC or ABS Pipe

100,000 BTU and 130,000 BTU Models Are Certified To Vent With 2" Schedule 40 PVC, CPVC or ABS Pipe

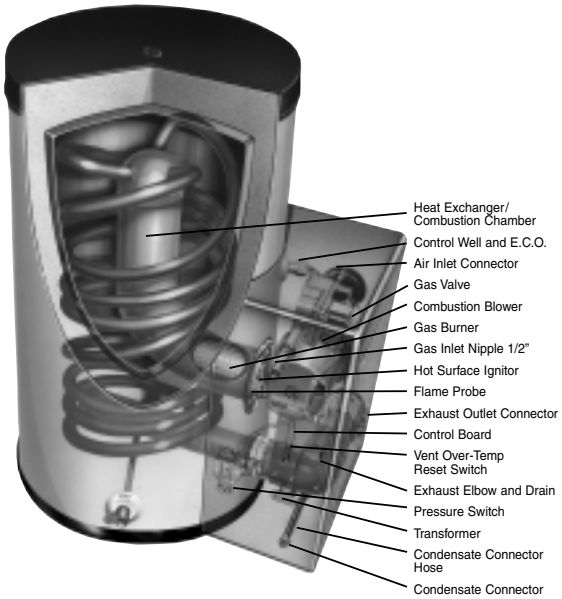
Available in Sizes Ranging From 45 - 119 Gallon Models

▶ 100,000 BTU/Hr. thru 199,000 BTU/Hr.

Rheem-Ruud AdvantagePlus™ Gas Commercial Water Heaters are specifically designed to provide customers with maximum savings on operation, space and installation. Designed with the most advanced technology available, these products optimize efficiency and operating reliability.

Construction Features:

- 316L stainless steel tank construction (requires no anode rods).
- No chimney required; direct vent using plastic pipe.
- Thermal efficiency of 95% dramatically reduces operating costs.
- 85 equivalent feet of vent length.
- Low NO_X emissions. Meets SCAQMD Rule 1146.2.
- High impact plastic jacket eliminates dents.
- 2” of non-CFC, polyurethane foam insulation.
- Less than 1/2 degree per hour heat loss (R17).
- Corrosion resistant, high efficiency 90/10 cupronickel heat exchanger.
- Self-diagnostic electronic control with digital readout for water temperature, set point and differential.
- Removable front cover allows easy access to equipment (24" service clearance recommended).
- Temperature range from 70°F to 160°F (maximum temperature setting of 180°F available on HE45-160 and HE45-199 booster models only).
- Zero clearance to all combustible surfaces.
- Factory installed AGA/ASME rated T&P relief valve.
- Booster installation kit provided with HE45-160 and HE45-199 booster models.



Certifications and Ratings:

The water heaters are UL/ULC listed and exceed the minimum efficiency requirements of ASHRAE/IES 90.1b-2001. All water heaters are supplied with an AGA/ASME rated temperature and pressure relief valve. The control panel is an integrated solid state temperature and ignition control device with integral diagnostics, LED fault display capability and a digital display of temperature settings. All models are North Carolina Code compliant. **CERTIFIED FOR A 150 PSI MAXIMUM WORKING PRESSURE.**

Continued next page.

RECOVERY CAPACITIES

Recovery in U.S. Gallons/Hr. (GPH) and Liters/Hr. (LPH) at Various Temperature Rises

MODEL NUMBER	INPUT (BTU/HR) NAT. & LP	THERMAL EFFICIENCY	UNITS	40°F (22°C)	50°F (28°C)	60°F (33°C)	70°F (39°C)	80°F (45°C)	90°F (50°C)	100°F (56°C)	110°F (61°C)	120°F (67°C)	130°F (72°C)	140°F (78°C)
HE45-100	100,000	95%	GPH	288	230	192	165	144	128	115	105	96	N/A	N/A
			LPH	*1090*	*872*	*726*	*623*	*545*	*484*	*436*	*396*	*363*	*N/A*	*N/A*
HE45-130 HE80-130 HE119-130	130,000	95%	GPH	374	299	249	214	187	166	150	136	125	N/A	N/A
			LPH	*1417*	*1133*	*944*	*809*	*708*	*630*	*567*	*515*	*472*	*N/A*	*N/A*
HE80-160 HE119-160	160,000	95%	GPH	461	368	307	263	230	205	184	167	154	N/A	N/A
			LPH	*1744*	*1395*	*1162*	*996*	*872*	*775*	*697*	*634*	*581*	*N/A*	*N/A*
HE80-199 HE119-199	199,000	95%	GPH	573	458	382	327	286	255	229	208	191	N/A	N/A
			LPH	*2169*	*1735*	*1446*	*1239*	*1084*	*964*	*867*	*789*	*723*	*N/A*	*N/A*
BOOSTER MODELS														
HE45-160	160,000	95%	GPH	461	368	307	263	230	205	184	167	154	142	132
			LPH	*1744*	*1395*	*1162*	*996*	*872*	*775*	*697*	*634*	*581*	*536*	*498*
HE45-199	199,000	95%	GPH	573	458	382	327	286	255	229	208	191	176	164
			LPH	*2169*	*1735*	*1446*	*1239*	*1084*	*964*	*867*	*789*	*723*	*667*	*620*

Recovery rating is based on thermal efficiencies obtained in an UL certified laboratory.

MAXIMUM DELIVERY

In U.S. Gallons and Liters (Includes useable storage and recovery for indicated times)

MODEL NUMBER	GALLONS	LITERS	INPUT (BTU/HR) NAT. & LP	TEMP. RISE	UNITS	5 MIN.	10 MIN.	15 MIN.	20 MIN.	30 MIN.	45 MIN.	1 HR.	2 HR.	3 HR.	MIN. TO RECOVER CONTENTS
HE45-100	45	170	100,000	100°F	GAL.	41	51	60	70	89	118	147	262	377	23
				37.7°C	LTR.	156	192	228	265	337	446	555	991	1427	
HE45-130	45	170	130,000	100°F	GAL.	44	56	69	81	106	144	181	331	481	18
				37.7°C	LTR.	166	214	261	308	403	544	686	1253	1819	
HE80-130	80	303	130,000	100°F	GAL.	68	81	93	106	131	168	206	355	505	32
				37.7°C	LTR.	259	306	354	401	495	637	779	1345	1912	
HE119-130	119	450	130,000	100°F	GAL.	96	108	121	133	158	196	233	383	532	48
				37.7°C	LTR.	363	410	457	504	599	750	882	1449	2015	
HE45-160	45	170	160,000	100°F	GAL.	47	62	78	93	124	170	216	400	584	15
				37.7°C	LTR.	177	235	294	352	468	642	817	1514	2211	
HE80-160	80	303	160,000	100°F	GAL.	71	87	102	117	148	194	240	424	609	26
				37.7°C	LTR.	270	328	386	444	561	735	909	1607	2304	
HE119-160	119	450	160,000	100°F	GAL.	99	114	129	145	175	221	268	452	636	39
				37.7°C	LTR.	373	432	490	548	664	838	1013	1710	2408	
HE45-199	45	170	199,000	100°F	GAL.	51	70	89	108	146	203	261	490	719	12
				37.7°C	LTR.	192	264	336	408	553	770	987	1854	2721	
HE80-199	80	303	199,000	100°F	GAL.	75	94	113	132	171	228	285	514	743	21
				37.7°C	LTR.	284	357	429	501	646	863	1079	1947	2814	
HE119-199	119	450	199,000	100°F	GAL.	102	121	141	160	198	255	312	542	771	31
				37.7°C	LTR.	338	460	532	604	749	966	1183	2050	2918	

All models have a maximum setpoint of 160°F with the exception of the HE45-160 and HE45-199 booster models. The HE45-160 and HE45-199 have a maximum setpoint of 180°F.

DIMENSIONAL INFORMATION

All dimensions shown in English and Metric

MODEL NUMBER	UNITS	A	B	C	D	E	F	G	H	VENT	WATER CONNECTIONS		APPROX SHIPPING WT.
											INLET	OUTLET	
HE45-100 HE45-130	inches	42	23 1/2	32	35	5	25 1/4	27 9/16	5 7/8	2	1	1	175 lbs.
	mm	*1067*	*597*	*813*	*889*	*127*	*641*	*700*	*149*	*51*	*25*	*25*	*79 kgs*
HE45-160 HE45-199	inches	42	23 1/2	32	35	5	25 1/4	27 9/16	5 7/8	3	1	1	175 lbs.
	mm	*1067*	*597*	*813*	*889*	*127*	*641*	*700*	*149*	*76*	*25*	*25*	*79 kgs*
HE80-130 HE80-160 HE80-199	inches	72	23 1/2	32	65	5	25 1/4	20 1/4	7 3/4	3*	1-1/2	1-1/2	235 lbs.
	mm	*1854*	*597*	*813*	*1651*	*127*	*641*	*514*	*197*	*76*	*38*	*38*	*106 kgs*
HE119-130 HE119-160 HE119-199	inches	73	27	36	66 3/4	6 3/4	28 7/8	22	9 1/2	3*	1-1/2	1-1/2	405 lbs.
	mm	*1854*	*686*	*914*	*1695*	*171*	*733*	*559*	*241*	*76*	*38*	*38*	*184 kgs*

* 130,000 BTU models are certified to be installed with 2" venting.

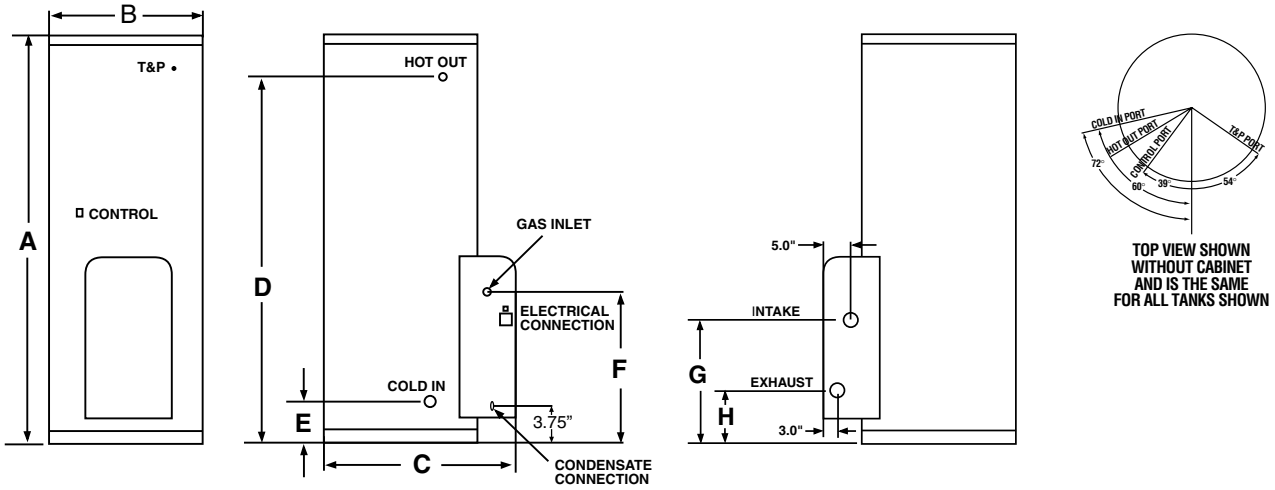
All models require a 120V power source.

See use and care manual for venting details.

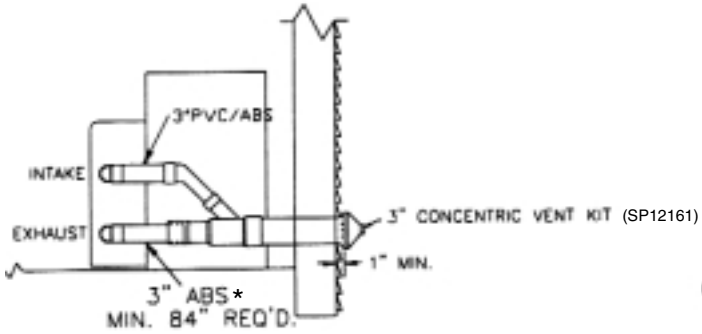
0" CLEARANCE TO COMBUSTIBLES ON ALL ADVANTAGE PLUS UNITS, HOWEVER, A 24" CONTROL PANEL SERVICE CLEARANCE IS RECOMMENDED.

MODELS WITH INPUTS OF 100,000 BTU AND 130,000 BTU ARE CERTIFIED TO VENT WITH 2" SCHEDULE 40 PVC, CPVC OR ABS PIPE

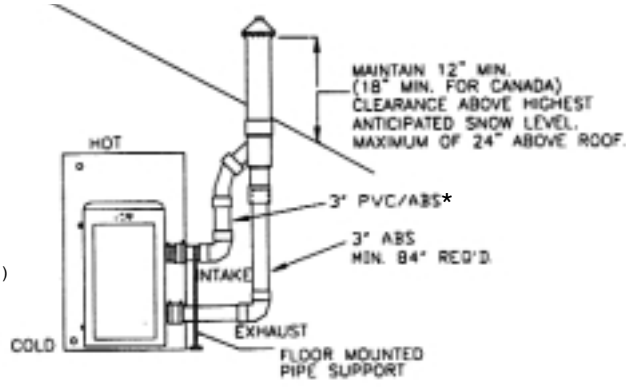
DIMENSIONAL INFORMATION



VENTING OPTIONS



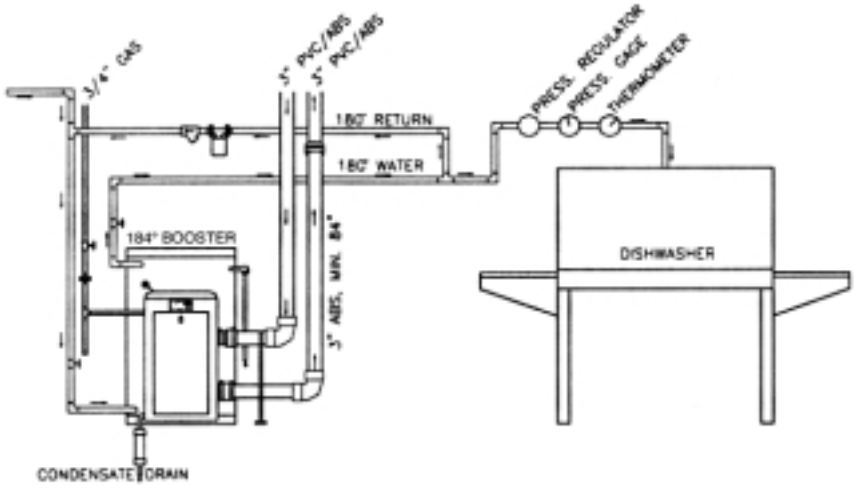
SIDE VENTING W/ CONCENTRIC VENT KIT
SIDE VIEW



VERTICAL ROOF VENTING W/ CONCENTRIC VENT KIT
FRONT VIEW

NOTE: An aluminum outside vent termination kit is also available. (SP12162)
*** HE80 and HE119 have 7" solid core ABS factory supplied.**

BOOSTER FOR HIGH TEMPERATURE SANITATION RINSE



The HE45-160 and HE45-199 Booster models are the only models equipped with a 180°F thermostat. Models with 180°F thermostats come standard with the Booster Installation Kit which includes all necessary components for an approved installation.

Booster Installation Kit includes:

- Nibco Tee – 1" x 1" x 1/2" (2 pieces)
- Female Adapter – 1" (2 pieces)
- Dial Thermometer (2 pieces)
- Expansion Tank – 4-1/2 gallon
- Grundfos 3 Speed Pump with Check Valve
- Nibco 1.2" x 12" Fitting Air Chamber
- Vacuum Relief Valve
- Pressure Gauge – 0-200 PSI
- Nibco Tee 712R – 1" x 1" x 3/4" (2 pieces)
- Nibco Tee 714RR – 1" x 1/2" x 1"
- Nibco Tee – 1" x 1/2" x 1" Copper
- Reducing Coupling
- Pressure Reducing Valve
- Nibco Male Adapter – 1"

Recommended Specifications (for trade reference only)

The Water Heaters shall be Rheem-Ruud model number HE- _____. The Water Heaters shall be a sealed combustion system, taking only outside air for combustion and exhausting the flue gas with plastic pipe. The intake air shall be piped with plastic PVC or ABS pipe, 3" in diameter (2" in diameter for 100,000 BTU and 130,000 BTU) and the exhaust gas shall be piped with CPVC or ABS solid NON FOAM CORE for the first 7' only, with the remaining pipe being sch 40 or 80 CPVC solid - solid PVC NON FOAM CORE - ABS solid NON FOAM CORE. All related intake air and exhaust gas shall be approved for zero clearance to any combustible surface.

The heaters shall be constructed of 316L stainless steel. The primary condensing heat exchanger shall be constructed of 90/10 cupronickel. The insulation is a water blown foam and shall be 2" thick with rating of R14.2 and 3" on the top of the heater rated at R21.3. Insulation shall be enclosed in a plastic shell. All components shall be located in the front of the heater for easy access for serviceability. All related hardware shall be constructed of stainless steel studs and brass nuts for serviceability.

Limited Warranty

This product features a three year limited warranty against tank leaks. Please refer to Commercial Warranty Information brochure for complete warranty information.

COMMERCIAL
WATER HEATERS

In keeping with its policy of continuous progress and product improvement, Rheem-Ruud reserves the right to make changes without notice.

Rheem Water Heaters • 101 Bell Road, Montgomery, Alabama 36117-4305 • www.rheem.com
Rheem Canada Ltd./Ltée,128 Barton Street West, Hamilton, Ontario L8N 3P3
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